

General

Title

Ambulatory care sensitive conditions: age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for admission to the hospital, per 100,000 population younger than age 75 years.

Source(s)

Canadian Institute for Health Information (CIHI). Indicator metadata: ambulatory care sensitive conditions. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 May [accessed 2015 Jul 13].

Measure Domain

Primary Measure Domain

Related Population Health Measures: Population Use of Services

Secondary Measure Domain

Population Health Quality Measure: Population Access

Brief Abstract

Description

This measure is used to assess the age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for admission to the hospital, per 100,000 population under age 75 years.

Calculation Description: (Total number of acute care hospitalizations for ambulatory care sensitive conditions in patients younger than age 75 ÷ total mid-year population younger than age 75) × 100,000 (age-adjusted)

Rationale

Hospitalization for an ambulatory care sensitive condition is considered to be a measure of access to appropriate primary health care. While not all admissions for these conditions are avoidable, it is

assumed that appropriate ambulatory care could prevent the onset of this type of illness or condition, control an acute episodic illness or condition, or manage a chronic disease or condition. A disproportionately high rate is presumed to reflect problems in obtaining access to appropriate primary care.

Evidence for Rationale

Anderson GM. Common conditions considered sensitive to ambulatory care. In: Goel V, et al, editor(s). Patterns of health care in Ontario. 2nd ed. Ottawa (ON): CMA; 1996. p. 104-10.

Billings J, Anderson GM, Newman LS. Recent findings on preventable hospitalizations. Health Aff (Millwood). 1996 Fall;15(3):239-49. [PubMed](#)

Billings J, Zeitel L, Lukomnik J, Carey TS, Blank AE, Newman L. Impact of socioeconomic status on hospital use in New York City. Health Aff (Millwood). 1993 Spring;12(1):162-73. [PubMed](#)

Canadian Institute for Health Information (CIHI). Indicator metadata: ambulatory care sensitive conditions. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 May [accessed 2015 Jul 13].

Manitoba Centre for Health Policy and Evaluation. Concept: ambulatory care sensitive (ACS) conditions. [internet]. 2007 Sep 26 [accessed 2010 Dec 14].

Primary Health Components

Ambulatory care sensitive conditions (angina, asthma, chronic obstructive pulmonary disease [COPD], diabetes, grand mal status and other epileptic convulsions, heart failure and pulmonary edema, hypertension); acute care hospitalization

Denominator Description

Total mid-year population younger than age 75 (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Total number of acute care hospitalizations for ambulatory care sensitive conditions in patients younger than age 75 (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Regional, County or City

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Age less than 75 years

Target Population Gender

Either male or female

National Framework for Public Health Quality

Public Health Aims for Quality

Population-centered

Transparency

National Strategy for Quality Improvement in Health Care

National Quality Strategy Priority

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

Data Collection for the Measure

Case Finding Period

April 1 to March 31

Denominator Sampling Frame

Geographically defined

Denominator (Index) Event or Characteristic

Geographic Location

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Total mid-year population younger than age 75

Exclusions

Population age 75 and older

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Total number of acute care hospitalizations for ambulatory care sensitive conditions in patients younger than age 75

Hospitalization for an ambulatory care sensitive condition is identified as any most responsible diagnosis code of

Grand mal status and other epileptic convulsions

Chronic obstructive pulmonary diseases (COPD)

Any most responsible diagnosis (MRDx) code

MRDx of acute lower respiratory infection, only when a secondary diagnosis* of J44 in International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canadian Enhancement (ICD-10-CA) or 496 in International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9/9-CM) is also present

Asthma

Diabetes

Heart failure and pulmonary edema**

Hypertension**

Angina**

Age at admission younger than 75

Sex recorded as male or female

Canadian resident (Canadian postal code)

Note:

Code may be coded in any position. Procedures coded as cancelled or abandoned after onset are excluded. Refer to the original measure documentation for the administrative codes.

*Secondary diagnosis refers to a diagnosis other than the most responsible one.

**Excluding cases with cardiac procedures. Refer to the original measure documentation for a list of cardiac procedure codes for exclusion.

Exclusions

Records with discharge as death (Discharge Disposition Code = 07)

Newborn, stillbirth or cadaveric donor records (Admission Category = N, R or S)

Numerator Search Strategy

Institutionalization

Data Source

Administrative clinical data

National public health data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Does not apply to this measure (i.e., there is no pre-defined preference for the measure score)

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

- Indicators are reported at the national, provincial/territorial, and regional levels.
- Unless otherwise specified, for indicators based on place of residence, data is reported based on the region of the patient's residence, not region of hospitalization. Consequently, these figures reflect the hospitalization experience of residents of the region wherever they are treated, including out of province, as opposed to the comprehensive activity of the region's hospitals (that will also treat people from outside of the region). Hospitalizations occurring in the U.S. or abroad are not included.
- For indicators based on place of service (where the patient was treated), data is reported based on the administrative region of the facility (e.g., region of hospitalization).
- Rates are standardized or risk-adjusted wherever possible to facilitate comparability across provinces/regions/facilities and over time.
- Standardized rates are adjusted by age (collapsed to five-year groupings) using a direct method of standardization based on the July 1, 1991, Canadian population.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Original Title

Ambulatory care sensitive conditions.

Measure Collection Name

Health Indicators ePublication 2015

Submitter

Canadian Institute for Health Information - Nonprofit Organization

Developer

Canadian Institute for Health Information - Nonprofit Organization

Funding Source(s)

Canadian Government

Composition of the Group that Developed the Measure

Employees: Canadian Institute for Health Information (CIHI) Health Indicators

Financial Disclosures/Other Potential Conflicts of Interest

None

Adaptation

This measure was adapted from the following source:

Ambulatory Care Sensitive Conditions (ACSC) Hospitalization Rates [Billings J, Anderson GM, Newman LS. *Recent findings on preventable hospitalizations*. Health Affairs, 1996.]

Date of Most Current Version in NQMC

2015 May

Measure Maintenance

Annually

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: Canadian Institute for Health Information (CIHI). Health indicators 2013: definitions, data sources and rationale. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2013 May. 89 p.

The measure developer reaffirmed the currency of this measure in April 2016.

Measure Availability

Source available from the [Canadian Institute for Health Information \(CIHI\) Web site](#)

.

For more information, contact CIHI at 4110 Yonge Street, Suite 300, Toronto, Ontario, Canada, M2P 2B7; Phone: 416-481-2002; Fax: 416-481-2950; E-mail: hsp@cihi.ca; Web site: www.cihi.ca

.

Companion Documents

The following are available:

Canadian Institute for Health Information (CIHI). Indicator library: general methodology notes - clinical indicators, March 2015. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 Mar. 19 p. This document is available from the [Canadian Institute for Health Information \(CIHI\) Web site](#) .

Canadian Institute for Health Information (CIHI). Canadian coding standards for version 2015 ICD-10-CA and CCI. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015. 511 p. This document is available from the [CIHI Web site](#) .

Canadian Institute for Health Information (CIHI). Health indicators interactive tool. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); [accessed 2015 Jan 20]. This tool is available from the [CIHI Web site](#) .

NQMC Status

This NQMC summary was completed by ECRI Institute on October 10, 2008. The information was verified by the measure developer on December 18, 2008.

This NQMC summary was updated by ECRI Institute on April 19, 2010. The information was verified by the measure developer on June 24, 2010.

This NQMC summary was retrofitted into the new template on May 18, 2011.

This NQMC summary was updated by ECRI Institute on March 18, 2013. The information was verified by the measure developer on May 17, 2013.

The CIHI informed NQMC that this measure was updated on October 31, 2013 and provided an updated version of the NQMC summary. This NQMC summary was reviewed and updated accordingly by ECRI Institute on February 21, 2014.

This NQMC summary was updated again by ECRI Institute on September 4, 2015. The information was verified by the measure developer on November 6, 2015.

The information was reaffirmed by the measure developer on April 29, 2016.

Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

Use of Canadian Institute for Health Information's (CIHI) quality measure for research, private study, education, or other non-commercial purposes is permitted where full credit is given to CIHI as author and owner of the quality measure. Any use that is wholly or partly commercial in nature requires CIHI's express written permission.

Questions and inquiries may be directed to: CIHI, Health Indicators, 4110 Yonge Street, Suite 300, Toronto, Ontario, Canada, M2P 2B7; Phone: 416-481-2002; Fax: 416-481-2950.

Production

Source(s)

Canadian Institute for Health Information (CIHI). Indicator metadata: ambulatory care sensitive conditions. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 May [accessed 2015 Jul 13].

Disclaimer

NQMC Disclaimer

The National Quality Measures Clearinghouse[®] (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.